# IN THE CLAIMS:

A method for rendering a portal graphical user interface (GUI), comprising:
 providing for the representation of a GUI desktop, a GUI look and feel, and a
GUI book as a set of controls wherein the controls can be organized in a logical
hierarchy;

traversing the representation, wherein the traversing comprises:

associating a theme with a first control in the set of controls;

rendering the first control according to the theme;

rendering any descendents of the first control according to the theme;

wherein any descendents of the first control can override the theme; and

wherein one of the set of controls can communicate with another of the set of
controls.

2. The method of claim 1 wherein:

the desktop is a view of a portal;

wherein the desktop can be represented by a desktop control; and wherein the desktop control is hierarchically superior to the shell control and to the book control.

3. The method of claim 1 wherein:

the look and feel determines the appearance of the portal; wherein the look and feel can be represented by a look and feel control; and wherein the theme is a variation of the look and feel.

4. The method of claim 1 wherein:

the book can be used to navigate to at least one portal page; and wherein the book is represented by a book control.

5. The method of claim 1 wherein:

one of the set of controls can respond to an event raised by another of the set of controls.

Express Mail No.: EV327621987US

Attorney Docket No.: BEAS-01378US0 SRM/DJB djb/beas/1378US0 application.doc

- 6. The method of claim 1 wherein:a control can have an interchangeable persistence mechanism.
- 7. The method of claim 1 wherein:a control can have an interchangeable rendering mechanism.
- 8. The method of claim 1, further comprising: accepting a request.
- 9. The method of claim 8 wherein: the request in a hypertext transfer protocol (HTTP) request.
- 10. The method of claim 8 wherein:the request originates from a Web browser.
- 11. The method of claim 1, further comprising: generating a response.
- 12. The method of claim 1 wherein:

a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

- 13. The method of claim 1 wherein:
  associating the theme with the first control can occur when the first control is rendered.
- 14. The method of claim 1 wherein: the first control inherits the theme from a parent control.
- 15. The method of claim 1 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

16. The method of claim 1 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

17. The method of claim 1 wherein:

the theme can be specified in whole or in part by a properties file.

18. The method of claim 17 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

19. The method of claim 17 wherein:

the properties file can specify at least one image.

20. The method of claim 1 wherein:

the GUI is part of a portal on the World Wide Web.

21. A method for rendering a graphical user interface (GUI), comprising:

accepting a request;

mapping the request to the set of controls that represent a GUI desktop, a GUI look and feel, and a GUI book, and wherein the controls are organized in a logical hierarchy;

traversing the representation, wherein the traversing comprises:

associating a theme with a first control in the set of controls;

rendering the first control according to the theme;

rendering any descendents of the first control according to the theme;

and

wherein any descendents of the first control can override the theme.

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US djb/beas/1378US0 application.doc

22. The method of claim 21 wherein:

the desktop is a view of a portal;

wherein the desktop can be represented by a desktop control; and

wherein the desktop control is hierarchically superior to the shell control and to the book control.

23. The method of claim 21 wherein:

the look and feel determines the appearance of the portal;

wherein the look and feel can be represented by a look and feel control; and

wherein the theme is a variation of the look and feel.

24. The method of claim 21 wherein:

the book can be used to navigate to at least one portal page; and

wherein the book is represented by a book control.

25. The method of claim 21 wherein:

the request in a hypertext transfer protocol (HTTP) request.

26. The method of claim 21 wherein:

the request originates from a Web browser.

27. The method of claim 21, further comprising:

generating a response.

28. The method of claim 1 wherein:

one of the set of controls can respond to an event raised by another of the set

of controls.

29. The method of claim 1 wherein:

a control can have an interchangeable persistence mechanism.

30. The method of claim 1 wherein:

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US

a control can have an interchangeable rendering mechanism.

#### 31. The method of claim 21 wherein:

a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

## 32. The method of claim 21 wherein:

associating a theme with the first control can occur when the first control is rendered.

## 33. The method of claim 21 wherein:

the first control inherits the theme from a parent control.

### 34. The method of claim 21 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

## 35. The method of claim 21 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

## 36. The method of claim 21 wherein:

the theme can be specified in whole or in part by a properties file.

### 37. The method of claim 36 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

### 38. The method of claim 36 wherein:

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US

the properties file can specify at least one image.

39. The method of claim 21 wherein: the GUI is part of a portal on the World Wide Web.

40. A method for rendering a graphical user interface (GUI), comprising:

providing for the representation of a GUI desktop, a GUI look and feel, and a GUI book as a plurality of controls wherein the controls are organized in a logical hierarchy;

traversing the representation, wherein the traversing comprises:

associating a first theme with a first control in the plurality of controls; rendering the first control according to the first theme;

associating a second theme with a second control in the plurality of controls:

rendering the second control according to the second theme; and wherein the second control is a descendant of the first control.

41. The method of claim 40, further comprising: accepting a request.

42. The method of claim 40 wherein:

the desktop is a view of a portal;

wherein the desktop can be represented by a desktop control; and wherein the desktop control is hierarchically superior to the shell control and to the book control.

43. The method of claim 40 wherein:

> the look and feel determines the appearance of the portal; wherein the look and feel can be represented by a look and feel control; and wherein the theme is a variation of the look and feel.

44. The method of claim 40 wherein:

the book can be used to navigate to at least one portal page; and

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US djb/beas/1378US0 application.doc

wherein the book is represented by a book control.

# 45. The method of claim 41 wherein: the request in a hypertext transfer protocol (HTTP) request.

- 46. The method of claim 41 wherein: the request originates from a Web browser.
- 47. The method of claim 40, further comprising: generating a response.
- 48. The method of claim 1 wherein: the first control can respond to an event raised by the second control.
- 49. The method of claim 1 wherein: a control can have an interchangeable persistence mechanism.
- 50. The method of claim 1 wherein: a control can have an interchangeable rendering mechanism.
- 51. The method of claim 40 wherein:

a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

- 52. The method of claim 40 wherein: the first control inherits the first theme from a parent control.
- 53. The method of claim 40 wherein:

the first theme specifies the appearance and/or functioning of the first control in the GUI.

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US

54. The method of claim 40 wherein:

the rendering the first control can be accomplished in parallel with the rendering of the second control.

55. The method of claim 40 wherein:

a theme can be specified in whole or in part by a properties file.

56. The method of claim 55 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

57. The method of claim 55 wherein:

the properties file can specify at least one image.

58. The method of claim 40 wherein:

the GUI is part of a portal on the World Wide Web.

59. A machine readable medium having instructions stored thereon that when

executed by a processor cause a system to:

provide for the representation of GUI desktop, a GUI look and feel, and a GUI book as a set of controls wherein the controls are organized in a logical hierarchy;

traverse the representation, wherein the traversing comprises instructions to cause the system to:

associate theme with a first control in the set of controls;

render the first control according to the theme;

render any descendents of the first control according to the theme;

wherein any descendents of the first control can override the theme; and

wherein one of the set of controls can communicate with another of the set of

controls.

60. The machine readable medium of claim 59, further comprising:

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US

accepting a request.

61. The machine readable medium of claim 59 wherein:

the desktop is a view of a portal;

wherein the desktop can be represented by a desktop control; and

wherein the desktop control is hierarchically superior to the shell control and to the book control.

62. The machine readable medium of claim 59 wherein:

the look and feel determines the appearance of the portal;

wherein the look and feel can be represented by a look and feel control; and

wherein the theme is a variation of the look and feel.

The machine readable medium of claim 59 wherein: 63.

the book can be used to navigate to at least one portal page; and

wherein the book is represented by a book control.

64. The machine readable medium of claim 59 wherein:

one of the set of controls can respond to an event raised by another of the set

of controls.

65. The machine readable medium of claim 59 wherein:

a control can have an interchangeable persistence mechanism.

66. The machine readable medium of claim 59 wherein:

a control can have an interchangeable rendering mechanism.

67. The machine readable medium of claim 59, further comprising instructions

Express Mail No.: EV327621987US

that when executed cause the system to:

accept a request.

68. The machine readable medium of claim 67 wherein:

the request in a hypertext transfer protocol (HTTP) request.

Attorney Docket No.: BEAS-01378US0 SRM/DJB

69. The machine readable medium of claim 67 wherein: the request originates from a Web browser.

70. The machine readable medium of claim 59, further comprising instructions that when executed cause the system to:

generate a response.

74.

71. The machine readable medium of claim 59 wherein:

a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

72. The machine readable medium of claim 59 wherein:

associating the theme with the first control can occur when the first control is rendered.

73. The machine readable medium of claim 59 wherein: the first control inherits the theme from a parent control.

The machine readable medium of claim 59 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

75. The machine readable medium of claim 59 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

76. The machine readable medium of claim 59 wherein:

the theme can be specified in whole or in part by a properties file.

77. The machine readable medium of claim 76 wherein:

Attorney Docket No.: BEAS-01378US0 SRM/DJB Express Mail No.: EV327621987US djb/beas/1378US0 application.doc

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

- 78. The machine readable medium of claim 76 wherein: the properties file can specify at least one image.
- 79. The machine readable medium of claim 59 wherein: the GUI is part of a portal on the World Wide Web.
- 80. A computer data signal embodied in a transmission medium, comprising:
  a code segment including instructions to provide for the representation of GUI
  desktop, a GUI look and feel, and a GUI book as a set of controls wherein the controls
  are organized in a logical hierarchy;
- a code segment including instructions to traverse the representation comprising:
  - a code segment including instructions to associate theme with a first control in the set of controls;
  - a code segment including instructions to render the first control according to the theme;
  - a code segment including instructions to render any descendents of the first control according to the theme;

Express Mail No.: EV327621987US

wherein any descendents of the first control can override the theme; and wherein one of the set of controls can communicate with another of the set of controls.